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09/430,691	10/29/1999	Anthony Toivonen	10559/043001	7631

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EXAMINER

NGUYEN, THU HA T

ART UNIT PAPER NUMBER

2155

DATE MAILED: 11/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/430,691

Applicant(s)

TOIVONEN, ANTHONY

Examiner

Thu Ha T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. Claims **1- 23** are presented for examination.

Response to Arguments

2. Applicant's arguments filed on September 03, 2002 have been fully considered but they are not persuasive because of the following reasons:

3. Applicant argues that Sung does not teach or suggest the step of the client node activates remote components on available server nodes without specific names or capabilities of nodes in the network servicing the request. In response to Applicant's argument, Examiner concludes that Sung does teach the client node activates remote components on available server nodes without specific names or capabilities of nodes in the network servicing the request as shown in abstract, figures 1-4, 8-11, 13, col. 2 lines 15-29, col. 3 lines 51-col. 4 lines 49, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42. In col. 3 lines 51-col. 5 lines 19 shown that the client node requests on the router 14, the router 14 ascertain that server 16 is the server can service the request then routes the request to server 16. In another embodiment, client sends another request to another router 56, the router 56 selects the server 54 to communicates with client 12. At this stage, client sends a request without knowing specific names and capabilities of servers since the router has to look up the routing

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table to see which server is slated to service the client request prior to assigning the client to the server.

4. Applicant argues that Sung does not teach or suggest the activation request processed by a client node that includes enhancements to the network protocol of the client node and server node includes enhancements to a network protocol of a server node. In response to the Applicant's argument, Examiner concludes that Sung does teach the activation request processed by a client node that includes enhancements to the network protocol of the client node and server node includes enhancements to a network protocol of a server node as shown in abstract, figures 1, 2, 4, col. 2 lines 15-29.

5. Applicant argues that Sung does not teach or suggest multicasting a machine-independent activation request to the network and transmission of capabilities information of the server sent in response to the activation request. In response to Applicant's argument, Examiner concludes that Sung does teach multicasting a machine-independent activation request to the network and transmission of capabilities information of the server sent in response to the activation request as shown in abstract, figures 1-4, 5A, 8-11, 13, col. 2 lines 15-30, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42. The routing table checks the status or capabilities of server before assigning the client to the server.

6. Furthermore, Applicant argues Sung does not teach or suggest the capability information includes a list of server IP addresses or names of servers that have the ability to service the request. Examiner concludes that Sung does teach

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capability information includes a list of server IP addresses or names of servers that have the ability to service the request as shown in figures 6-7, col. 2 lines 15-30.

7. Therefore, the Examiner asserts that cited prior arts teach or suggest the subject matter broadly recited in independent claims 1, 6, 7, 10, 14, 20-23. Claims 2-5, 8-9, 11-13, 15-19 are also rejected at least by virtue of their dependency on independent claims and by other reasons set forth in the previous office action [see paper no. 12]. Accordingly, claims 1-23 are respectfully rejected.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

9. Claims 1-4, 7-8, 10-12, 14, 20-23 are rejected under 35 U.S.C. § 102(a) as being anticipated by **Sung et al.**, (hereinafter Sung) U.S. Patent No. **6,226,684**.

10. As to claim 1, **Sung** teaches the invention as claimed, including a distributed component system in a network comprising:

a client node configured to process client activation requests (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-29);

a server node configured to monitor activation requests from the client node, said node operating to enable the client node to activate remote components on available server nodes without specific names or capabilities of nodes in the network servicing the request (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-29, col. 3 lines 51-col. 4 lines 49, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42)

11. As to claim 2, **Sung** teaches the invention as claimed, wherein said network comprises a local-area network, a wide-area network, or Internet (figure 1).

12. As to claim 3, **Sung** teaches the invention as claimed, wherein said activation requests are processed by a client node that includes enhancements to a network protocol of the client node (abstract, figures 1-2).

13. As to claim 4, **Sung** teaches the invention as claimed, wherein said server node include enhancements to a network protocol of the server node (abstract, figures 1-2).

14. As to claim 7, **Sung** teaches the invention as claimed, including a method comprising:

receiving a machine-independent activation request from a client in a network (abstract, figures 1-4, 8-11, 13, col. 1 lines 55-col. 2 lines 29),

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multicasting said activation request to the network (abstract, figures 1-4, 13, col. 2 lines 15-29, col. 5 lines 29-59),

receiving capability information from servers available to service said activation request (abstract, figures 1-4, 5A, 8-11, 13, col. 2 lines 15-30, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42).

15. As to claim 8, **Sung** teaches the invention as claimed, wherein the capability information includes a list of server IP addresses or UNC names of servers that have the ability to service a request for a specific CLSID (figures 6-7).

16. As to claim 10, **Sung** teaches the invention as claimed, including a method comprising:

monitoring at a server a specific port to receive a machine independent client activation request within a network (figures 7, 10, col. 9 lines 15-54, col. 11 lines 10-col.12 lines 24),

retrieving a client address from an IP packet associated with the request (figure 2, col. 4 lines 42-col. 5 lines 59),

returning capability information of the server to the client address (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-30, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42).

17. As to claim 11, **Sung** teaches the invention as claimed, wherein monitoring the specific port includes monitoring a port that is tied to a multicast IP address (figures 7, 10, col. 9 lines 15-54, col. 11 lines 10-col.12 lines 24),

18. As to claim 12, **Sung** teaches the invention as claimed, wherein returning includes returning a server IP address (figure 7, 10, col. 9 lines 15-54, col. 11 lines 10-col.12 lines 24).

19. As to claim 14, **Sung** teaches the invention as claimed, a method comprising:

receiving a machine independent activation request from a client in a network (abstract, figures 1-4, 8-11, 13, col. 1 lines 55-col. 2 lines 29),

multicasting said activation request to the network (abstract, figures 1-4, 13, col. 2 lines 15-29, col. 5 lines 29-59),

requesting capability information from servers available to service said activation request (abstract, figures 1-4, 5A, 8-11, 13, col. 2 lines 15-30, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42),

monitoring a port that is tied to a multicast IP address (figures 7, 10, col. 9 lines 15-54, col. 11 lines 10-col.12 lines 24),

retrieving a client address from an IP packet (figure 2, col. 4 lines 42-col. 5 lines 59),

returning capability information of the server to the client address (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-30, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42).

20. As to claim 20, **Sung** teaches the invention as claimed, including a computer program, residing on a computer readable medium (abstract, figure 2), the program comprising executable instructions that enable the computer to:

receive a machine-independent activation request from a client in a network (abstract, figures 1-4, 8-11, 13, col. 1 lines 55-col. 2 lines 29),

multicast said activation request to the network (abstract, figures 1-4, 13, col. 2 lines 15-29, col. 5 lines 29-59),

receive capability information from servers available to service said activation request (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-30, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42).

21. As to claim 21, **Sung** teaches the invention as claimed, including a computer program, residing on a computer readable medium (abstract, figure 2), the program comprising executable instructions that enable the computer to:

monitor at a server a specific port that is tied to a multicast IP address to receive a machine-independent client activation request within a network (figures 7, 10, col. 9 lines 15-54, col. 11 lines 10-col.12 lines 24),

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retrieve a client address from an IP packet associated with the request (figure 2, col. 4 lines 42-col. 5 lines 59),

return capability information of the server to the client address (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-30, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42).

22. As to claim 22, **Sung** teaches the invention as claimed, including a computer program, residing on a computer readable medium (abstract, figure 2), the program comprising executable instructions that enable the computer to:

receive a machine-independent activation request from a client in a network (abstract, figures 1-4, 8-11, 13, col. 1 lines 55-col. 2 lines 29),

multicast said activation request to the network (abstract, figures 1-4, 13, col. 2 lines 15-29, col. 5 lines 29-59),

request capability information from servers available to service said activation request (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-30, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42),

monitor a port that is tied to a multicast IP address (figures 7, 10, col. 9 lines 15-54, col. 11 lines 10-col.12 lines 24),

retrieve a client address from an IP packet (figure 2, col. 4 lines 42-col. 5 lines 59),

return capability information of the server to the client address (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-30, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42).

23. As to claim 23, **Sung** teaches the invention as claimed, including a distributed component network comprising: client nodes configured to be able to request activation of remote components at run-time without specific names or capabilities of nodes servicing those requests (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-29, col. 3 lines 51-col. 4 lines 49); and server nodes operating to monitor the requests and respond appropriately to service the requests (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-30, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42).

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. Claims 5, 6, 9, 13, 15-19 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over **Sung et al.**, (hereinafter Sung) U.S. Patent No. **6,226,684**, in view of **Goertzel et al.**, (hereinafter Goertzel) U.S. Patent No. **6,141,696**.

26. As to claim 5, **Sung** does not explicitly teach the invention substantially as claimed. However, **Goertzel** teaches the invention as claimed, wherein said distributed system comprises a DCOM framework (col. 1 lines 58-col. 2 lines 10, col. 3 lines 4-47). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Sung and Goertzel** to have a distributed system comprises a DCOM framework because it would permit the distribution of different components for a single application across two or more network computers.

27. As to claim 6, **Goertzel** teaches the invention as claimed, including a distributed computing system in a network having a client and a server (figures 1, 2), the system comprising:

a first module configured to augment activation capabilities of the client by intercepting and processing machine-independent client activation requests (abstract, figure 2, col. 1 lines 25-44, col. 4 lines 14-36),

a second module coupled to the server, said second module configured to monitor requests on the server by the client, said first and second modules enabling the client to trigger creation of remote components (figure 2, col. 4 lines 14-58). without specific names or capabilities of network nodes servicing that creation (figures 3, 5, col. 6 lines 64-6, col. 21 lines 54-57). However, **Goertzel** does not explicitly teach the step of enabling the client to trigger creation of remote components without specific names or capabilities of network nodes servicing that creation. **Sung** teaches the client to trigger

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creation of remote components without specific names or capabilities of network nodes servicing that creation (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-29, col. 3 lines 51-col. 4 lines 49). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Goertzel and Sung** to have the client node activates components on available server nodes without specific names or capabilities of nodes in the network servicing the request because it would be able the client in a communication system search and connect to a server that is available in a server cluster network that could help client eliminating failure or re-connection with specific server.

28. As to claim 9, **Sung** does not explicitly teach the capability information includes an interface through a CLSID directly. However, **Goertzel** teaches the invention as claimed, wherein the capability information includes an interface through a CLSID directly (abstract, figures 1, 2, col. 3 lines 48-col. 4 lines 58). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Sung and Goertzel** to have the capability information includes an interface through a CLSID directly because it would help the client program can load the class's executable file either in the client program's process or into the server process and the client program can call to request information or services from server component using its assigned CLSID.

29. As to claim 13, **Sung** does not explicitly teach the invention as claimed; however, **Goertzel** teaches wherein returning includes using a distributed system creation mechanism to create, package, and return an interface pointer in a location transparent form (figure 3, col. 3 lines 39-col. 5 lines 67). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Sung and Goertzel** to have the same motivation as set forth in claim 9, *supra*.

30. As to claim 15, **Sung** does not explicitly teach the invention as claimed. However, Hunt teaches the invention further comprising: providing a CLSID, an interface identifier, a maximum and minimum response wait time, a maximum and minimum response count, and whether server names or IP addresses should be returned, before the client requests capability information from the servers (abstract, figures 1, 2, col. 3 lines 48-col. 4 lines 58, col. 7 lines 19-59). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Sung and Goertzel** to have the same motivation as set forth in claim 9, *supra*.

31. As to claim 16, **Sung** does not explicitly teach the invention as claimed; however, **Goertzel** teaches wherein returning capability information includes returning one to many server names or IP addresses capable of servicing said activation request for the particular CLSID and information identifier requested (figure 3). It would have

been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Sung and Goertzel** to have the same motivation as set forth in claim 9, supra.

32. As to claim 17, **Sung** does not explicitly teach the invention as claimed; however, **Goertzel** teaches wherein returning capability information includes returning a pointer to the interface identifier (figures 2, 3). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Sung and Goertzel** to have the same motivation as set forth in claim 9, supra.

33. As to claim 18, **Sung** does not explicitly teach the invention as claimed; however, **Goertzel** teaches wherein said pointer is packaged into a location transparent form (figure 3). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Sung and Goertzel** to have the same motivation as set forth in claim 9, supra.

34. As to claim 19, **Sung** does not explicitly teach the invention as claimed. However, **Goertzel** teaches the location transparent form is a DCOM remote OBJREF in the form of a MEOW packet (col. 3 lines 39-col. 5 lines 67). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to

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combine the teachings of **Sung and Goertzel** to have the same motivation as set forth in claim 9, *supra*.

Conclusion

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

36. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Ha Nguyen, whose telephone number is (703) 305-7447. The examiner can normally be reached Monday through Friday from 7:00 AM to 4:00 PM.

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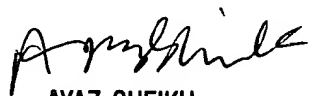
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SPE Ayaz R. Sheikh, can be reached at (703) 305-9648.

Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.

The fax number for art unit 2155 is (703) 305-7201.

Thu Ha Nguyen

November 13, 2002


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